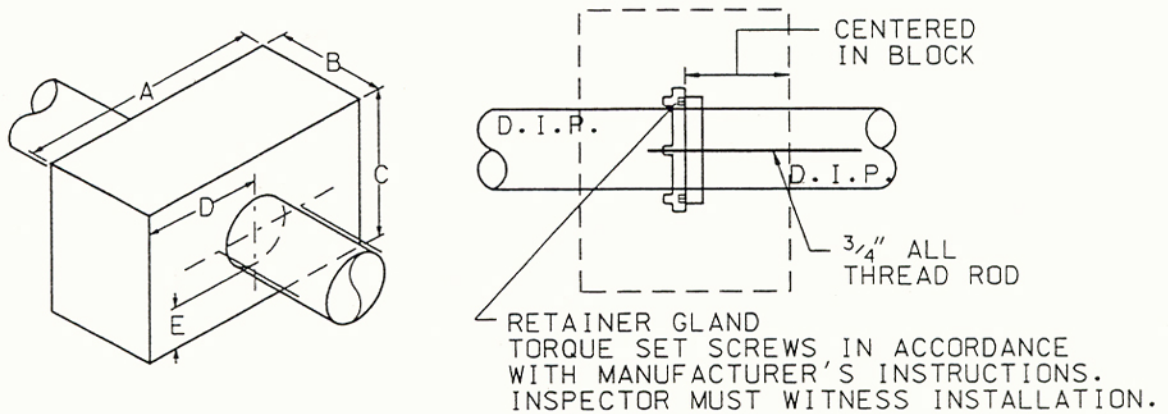


DETAIL 02713-12(C) COBB COUNTY WATER SYSTEM THRUST RESTRAINT: CONCRETE COLLAR WITH RODDING SYSTEM

AUGUST 7, 2001

AGENCY DIRECTOR



MINIMUM DIMENSIONS IN FEET FOR CONCRETE COLLAR
ON DUCTILE IRON PIPE TO BE USED WITH EMBEDDED DUCTILE IRON RETAINER GLAND

PIPE SIZE	A	B	C	D	E	VOLUME CU. YDS.	CONC. WT.	THRUST
4"	3'- 6"	3'- 0"	1'- 5"	1'- 6"	1'- 0"	0.55	2230	3150
6"	4'- 0"	3'- 0"	2'- 7"	2'- 0"	1'- 0"	1.15	4650	7070
8"	4'- 6"	3'- 0"	3'- 0"	2'- 3"	1'- 3"	1.50	6075	12,570
10"	5'- 2"	3'- 0"	3'- 2"	2'- 7"	1'- 3"	1.81	7330	19,635
12"	5'- 9"	3'- 0"	3'- 8"	2'- 10 1/2"	1'- 8"	2.34	9475	28,775
14"	6'- 6"	3'- 0"	4'- 0"	3'- 3"	1'- 9"	2.89	11,700	38,490
16"	6'- 9"	3'- 0"	4'- 9"	3'- 3"	2'- 3"	3.56	14,410	50,270

NOTES :

1. ALL WATER MAINS GREATER THAN 18" I.D. SHALL BE INDIVIDUALLY CALCULATED BY C.C.W.S. ENGINEERING DEPARTMENT.
2. SOIL CONDITIONS SHALL BE VERIFIED BY THE ENGINEER BEFORE THRUST RESTRAINT DESIGN IS IMPLEMENTED.
3. PIPE MUST BE DUCTILE IRON.

DESIGN DATA :

1. DIMENSION OF THRUST RESTRAINT IN FEET BASED ON 2000 POUNDS PER SQUARE FOOT SOIL BEARING PRESSURE AND 230' PER SQUARE INCH TEST PRESSURE. ACTUAL INSIDE DIAMETER OF DUCTILE IRON PIPE, CLASS 31, USED AS STANDARD.
2. CONCRETE SHALL BE CLASS A, 3000 P.S.I.
3. UNDER ADVERSE CONSTRUCTION CONDITIONS, CONCRETE SHALL BE "HIGH EARLY" TYPE.